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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,302	12/02/2003	Akihiro Horii	P/16-347 DIV	5903
2352	7590	12/21/2004	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			LEE, HWA S	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,302

Applicant(s)

HORII ET AL.

Examiner

Andrew Hwa S. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 and 68-80 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-59 and 68-80 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

(1) the specifics of an optical imaging device comprising an optical length variation system comprising a spectrum dispersion element, a light introducing block, a phase modulator, a spectrum reuniting element, and a light pick up block, wherein the phase modulator is realized with a wedged prism made of light-transmissive material comprising a first embodiment corresponding to Figures 1-9;

(2) the specifics of an optical imaging device comprising at least one cone lens interposed between the second diffraction grating and the fourth positive lens comprising a second embodiment corresponding to Figures 10-14;

(3) the specifics of an optical imaging device wherein the phase modulator is made by sandwiching a light-transmissive liquid between at least two light-transmissive plates having flat surfaces comprising a third embodiment corresponding to Figures 15-17;

(4) the specifics of an optical imaging device comprising a fourth lens offering a positive power in the direction of a first axis and no power in the direction of a second axis perpendicular to the first axis, a fifth lens offering no power in the first-axis direction and a positive power in the second axis direction comprising a fourth embodiment corresponding to Figures 18A-19B;

(5) the specifics of an optical imaging device comprising a optical length variation system comprising a first prism and a second prism comprising a fifth embodiment corresponding to Figures 20-23;

(6) the specifics of an optical imaging device comprising an optical length variation system wherein the axis of rotation of the wedge prism is coincident with a path along which a principal ray of light having the same wavelength as the center wavelength of the light passes through the wedged prism comprising a sixth embodiment corresponding to Figures 24-26;

(7) the specifics of an optical imaging device comprising an optical length variation system comprising collimating members comprising seventh embodiment corresponding to Figures 27-30b;

(8) the specifics of an optical imaging device comprising an optical length variation system having a first variant of the electrooptic deflectors serving as an optical scanning comprising an eighth embodiment corresponding to Figure 31;

(9) the specifics of an optical imaging device comprising an optical length variation system having a second variant of the electrooptic deflectors comprising a ninth embodiment corresponding to Figures 32A-32C;

(10) the specifics of an optical imaging device comprising an optical length variation system comprising a tenth embodiment corresponding to Figures 33-34;

(11) the specifics of an optical imaging device comprising an optical length variation system comprising a rotary disk and a plurality of slits comprising an eleventh embodiment corresponding to Figures 35A-36;

(12) the specifics of an optical imaging device comprising an optical length variation system comprising a rotary disk and a plurality of slits comprising a plurality of pinholes comprising a twelfth embodiment corresponding to Figure 37;

(13) the specifics of an optical imaging device comprising an optical length variation system comprising four optical block equidistantly arranged comprising a thirteenth embodiment corresponding to Figure 38-39;

(14) the specifics of an optical imaging device comprising an optical length variation system wherein the optical block is unified with the rotary disk comprising a fourteenth embodiment corresponding to Figure 40;

(15) the specifics of an optical imaging device comprising an optical length variation system wherein the rotary disk is made by bonding optical blocks comprising a fifteenth embodiment corresponding to Figure 41;

(16) the specifics of an optical imaging device comprising an optical length variation system comprising a pair of transmissive diffraction gratings comprising a sixteenth embodiment corresponding to Figure 42;

(17) the specifics of an optical imaging device comprising an optical length variation system comprising a pair of reflective diffraction gratings comprising a seventeenth embodiment corresponding to Figures 43 and 44;

(18) the specifics of an optical imaging device comprising an optical length variation system comprising an eighteenth embodiment corresponding to Figure 45;

(19) the specifics of an optical imaging device comprising an optical probe comprising a nineteenth embodiment corresponding to Figures 46-51;

(20) the specifics of an optical imaging device comprising an optical probe comprising a mirror located at the distal end comprising a twentieth embodiment corresponding to Figure 52;

(21) the specifics of an optical imaging device comprising an optical probe comprising a rotary prism comprising a twenty first embodiment corresponding to Figures 53-55;

(22) the specifics of an optical imaging device comprising an optical probe comprising an optical element that is moved linearly to produce an image comprising a twenty-second embodiment corresponding to Figures 56-57;

(23) the specifics of an optical imaging device comprising an optical probe comprising an optical circulator comprising a twenty-third embodiment corresponding to Figures 58-62;

(24) the specifics of an optical imaging device comprising a twenty-fourth embodiment corresponding to Figures 63-68;

(25) the specifics of an optical imaging device comprising a distal optical system comprising a twenty-fifth embodiment corresponding to Figure 69;

(26) the specifics of an optical imaging device comprising a distal optical system comprising a twenty-sixth embodiment corresponding to Figure 70;

(27) the specifics of an optical imaging device comprising a distal optical system comprising a twenty-seventh embodiment corresponding to Figure 71;

(28) the specifics of an optical imaging device comprising an optical system comprising a twenty-eighth embodiment corresponding to Figure 72;

(29) the specifics of an optical imaging device comprising an optical system comprising a twenty-ninth embodiment corresponding to Figure 73;

(30) the specifics of an optical imaging device comprising an optical system comprising a thirtieth embodiment corresponding to Figure 74;

(31) the specifics of an optical imaging device comprising an optical system comprising a thirty-first embodiment corresponding to Figures 75-77.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419.

The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew H. S. Lee
Examiner
Art Unit 2877